IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Miller, *et al.*	) Confirmation No: 4537
	)
Serial No.: 09/873,222	) Group Art Unit: 2624
	)
Filed: June 4, 2001	) Examiner: Tucker, Wesley J.
	)
For: Remote Digital Image Enhancement System and Method	) Atty. Docket No.: 10010869-1

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

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Sir:

This Appeal Brief under 37 C.F.R. § 41.37 is submitted in support of the Notice of Appeal filed November 15, 2006, responding to the final Office Action mailed June 15, 2006.

It is not believed that extensions of time or fees are required to consider this Appeal Brief. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 08-2025.

I. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. Related Appeals and Interferences

There are no known related appeals or interferences that will affect or be affected by a decision in this Appeal.

III. Status of Claims

Claims 4-5 and 12-15 stand finally rejected. No claims have been allowed. Claims 1-3, 6-11, and 16 have been canceled. The final rejections of claims 4-5 and 12-15 are appealed.

IV. Status of Amendments

This application was originally filed on June 4, 2001, with sixteen (16) claims. In a Response filed June 4, 2004, Applicant amended claims 1, 4, 7, and 12. In a Response filed September 14, 2004, Applicant amended claims 4, 7, and 12 and canceled claim 16. In a Response filed December 8, 2004, Applicant amended claims 1, 2, 4, 7-8, and 12 and canceled claim 6. In a Response filed May 3, 2005, Applicant presented remarks without any claim

amendments. In a Response filed August 30, 2005, Applicant presented remarks without any claim amendments. In a Response filed April 3, 2006, Applicant amended claims 1, 7, 9, and 11 and canceled claim 10. In a Response filed October 16, 2006, Applicant canceled claims 1-3, 7-9, and 11. The claims in the attached Claims Appendix (see below) reflect the present state of Applicant's claims.

V. Summary of Claimed Subject Matter

The claimed inventions are summarized below with reference numerals and references to the written description ("specification") and drawings. The subject matter described in the following appears in the original disclosure at least where indicated, and may further appear in other places within the original disclosure.

Embodiments according to independent claim 4 describe a digital image enhancement system. The system comprises means for receiving (FIG. 2, 219) a digital image packet directly from a customer via a network (FIG. 1, 120). The digital image packet includes a digital image from a digital camera and a customer preference parameter. The system further comprises means for selecting (FIG. 2, 212, 220) a remote digital image editing system (FIG. 4, 305) according to the customer preference parameter and means for transmitting (FIG. 2, 219) the digital image packet to the selected remote digital image editing system. Such a system further comprises means for enhancing (FIG. 4, 312, 320) the digital image at the selected remote digital image editing system (FIG. 4, 305) based on the customer preference parameter and means for transmitting (FIG. 4, 319) an enhanced digital image

packet to the customer via the network (FIG. 4, 120). The enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images. Applicant's specification, page 2, lines 9-19; page 3, lines 4-12; pages 5-7, lines 16-21; pages 7-12, lines 22-15; pages 13-16, lines 12-17.

Embodiments according to independent claim 12 describe a digital image enhancement method. The method comprises receiving (FIG. 3, 231) a digital image packet directly from a customer via a network (FIG. 1, 120). The digital image packet includes a digital image from a digital camera and a customer preference parameter. The method further comprises selecting (FIG. 3, 239, 241, 243) a remote digital image editing system (FIG. 4, 305) according to the customer preference parameter and transmitting (FIG. 3, 241, 245) the digital image packet to the selected remote digital image editing system (FIG. 4, 305). Such a method further comprises enhancing (FIG. 5, 339) the digital image at the selected remote digital image editing system (FIG. 4, 305) based on the customer preference parameter and transmitting (FIG. 5, 343) an enhanced digital image packet to the customer via the network (FIG. 4, 120). The enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images. Applicant's specification, pages 2-3, lines 20-3; pages 5-7, lines 16-21; pages 7-13, lines 22-11; pages 13-16, lines 12-17.

VI. Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejections are to be reviewed on appeal:

Claims 4-5 and 12-15 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over the combination of *Shiota* (U.S. Patent No. 6,324,521) in view of *Echerer* (U.S. Patent No. 5,384,862)

VII. Arguments

The Appellant respectfully submits that Applicant's claims 4-5 and 12-15 are patentable under 35 U.S.C. §103. The Appellant respectfully requests that the Board of Patent Appeals overturn the final rejection of those claims at least for the reasons discussed below.

A.   The *Shiota* Disclosure

Shiota appears to teach at most a network photograph service system. In this system, a picture image is obtained by a film scanner by scanning a film brought in by a customer to a photo lab or "obtained from a memory or the like of a digital camera brought in by a customer." Col. 2, lines 33-42 and col. 7, lines 45-57. The digital image is stored on a network and made accessible to the customer. Col. 2, lines 62-67. Therefore, a customer may request a new print of a stored digital image to be made and the print is then mailed or received by picking up the print at the photo lab. Col 3, lines 19-30; col. 4, lines 29-42; col. 8, lines 17-31; col. 9, lines 5-16. Also, if a print is outputted by a photo lab or laboratory according to a processing procedure, such as to rotate a picture by 90 degrees or to lower the saturation of the specified picture, the resulting print is affected by such a procedure and not

the stored digital image. Further, a print of the stored digital image is provided to the customer and not the digital image itself. Cols. 4-5, lines 55-37.

B.   The *Echerer* Disclosure

Echerer describes a method and apparatus for evaluating radiographic images. For example, *Echerer* describes that a radiograph, such as an X-ray, is represented as a digital image using a scanner or digital camera. Col. 4, lines 32-61. The digital representation of the radiograph may be enhanced using computer processing. Col. 5, lines 32-46. "[T]he processing enhances the image displayed and extracts information from the image as a result of an interchange of instructions and responses between CPU and user." Col. 8, lines 18-22. In other words, "[t]he apparatus helps to extract that information by creating an accurate image or replica from the radiograph and performing certain operations on it to enhance it and to analyze it so that the information it contains can be readily discerned, diagnosed and, in general, evaluated by the user." Col. 4, lines 4-12.

C.   Applicant's Claim 4

As provided in independent claim 4, Applicant claims:

> A digital image enhancement system, comprising:
> *means for receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter;*
> means for selecting a remote digital image editing system according to the customer preference parameter;
> means for transmitting the digital image packet to the selected remote digital image editing system;
> *means for enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter;* and

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> *means for transmitting an enhanced digital image packet to the customer via the network,*
>
> *wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images.*

(Emphasis added).

Applicant respectfully submits that independent claim 4 is allowable for at least the reason that *Shiota* in view of *Echerer* does not disclose, teach, or suggest at least "means for receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter," "means for enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter; means for transmitting an enhanced digital image packet to the customer via the network, wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images," as recited and emphasized above in claim 4.

Shiota appears to teach at most a network photograph service system. In this system, a user does not provide a digital image to the network photograph service system via a network. Rather, *Shiota* describes that a picture image is obtained by a film scanner by scanning a film brought in by a customer to a photo lab or "obtained from a memory or the like of a digital camera brought in by a customer." Col. 2, lines 33-42 and col. 7, lines 45-57. As such, *Shiota* fails to teach or suggest at least "means for receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter," as recited in claim 4.

Further, *Shiota* describes that a print is provided to a user. For example, a customer may request a new print of a stored digital image to be made and the print is then mailed or received by picking up the print at the photo lab. Col 3, lines 19-30; col. 4, lines 29-42; col. 8, lines 17-31; col. 9, lines 5-16. Also, if a print is outputted by a photo lab or laboratory according to a processing procedure, such as to rotate a picture by 90 degrees or to lower the saturation of the specified picture, the resulting print is affected by such a procedure and not the stored digital image. Moreover, a print of the stored digital image is provided to the customer and not the digital image itself. Cols. 4-5, lines 55-37. As such, *Shiota* fails to teach or suggest at least "means for enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter," as recited in claim 4.

Likewise, *Shiota* fails to teach or suggest at least "means for transmitting an enhanced digital image packet to the customer via the network, wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images," as recited in claim 4, since *Shiota* does not transmit an enhanced digital image to a user, among other reasons.

Echerer fails to cure the deficiencies of the *Shiota* reference in disclosing all of the features of claim 4. For example, *Echerer* fails to teach or suggest that a digital image is received from a customer via a network. Rather, in *Echerer*, a radiograph is scanned so that a digital representation may be made. Further, *Echerer* fails to teach or suggest an "enhanced digital

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image packet [that] includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images," as recited in claim 4. Although the Examiner in the Advisory Action strongly advocates that *Echerer* discloses the foregoing feature, Applicant respectfully notes that *Echerer* states that "processing enhances the image displayed and extracts information from the image as a result of an interchange of instructions and responses between CPU and user." *See* col. 8, lines 18-22 and Advisory Action, page 2 ("It is unclear why Applicant insists that the report does not contain information that decribes [sic] the enhancemnts [sic] made for the digital images when it so clearly does."). Applicant respectfully submits that the "information" referenced in the above passage refers to information available in the digital representation of an X-ray image that is not discernable from the X-ray image itself. Accordingly, a report may be prepared "using the information and the image together with its enhancements and/or without them." Col. 6, lines 33-35. For example, *Echerer* also states that "[t]he apparatus helps to extract that information by creating an accurate image or replica from the radiograph and performing certain operations on it to enhance it and to analyze it so that the information it contains can be readily discerned, diagnosed and, in general, evaluated by the user." Col. 4, lines 4-12. As such, *Echerer* fails to teach or suggest that an enhanced digital packet that includes a description of enhancements made for a digital image, as described in claim 4, among other claimed features.

As a result, a *prima facie* case establishing an obviousness rejection by the proposed combination of *Shiota* in view of *Echerer* has not been made. Therefore, the rejection of claim 4 should be withdrawn.

D.   Applicant's Claim 5

Because independent claim 5 is allowable over the cited art of record, dependent claim 5 (which depends from independent claim 4) is allowable as a matter of law for at least the reason that dependent claim 5 contains all the features of independent claim 4.   For at least this reason, the rejection of claim 5 should be withdrawn.

Additionally and notwithstanding the foregoing reasons for the allowability of claim 5, the dependent claim recites further features and/or combinations of features (as is apparent by examination of the claim itself) that are patentably distinct from the cited art of record.   Hence, there are other reasons why the dependent claim is allowable.

For example, the proposed combination of *Shiota* in view of *Echerer* fails to teach or suggest a "means for automatically enhancing the digital image based on the customer preference parameter," as recited in claim 5.

E.   Applicant's Claim 12

As provided in independent claim 12, Applicant claims:

> A digital image enhancement method, comprising the steps of:
> *receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter;*
> selecting a remote digital image editing system according to the customer preference parameter;
> transmitting the digital image packet to the selected remote digital image editing system;
> *enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter;* and
> *transmitting an enhanced digital image packet to the customer via the network, wherein the enhanced digital image packet includes an enhanced digital image*

and an enhancement description packet that describes the enhancements made for each of the digital images.

(Emphasis added).

Applicant respectfully submits that independent claim 12 is allowable for at least the reason that *Shiota* in view of *Echerer* does not disclose, teach, or suggest at least "receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter," "enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter; transmitting an enhanced digital image packet to the customer via the network, wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images," as recited and emphasized above in claim 12.

Shiota appears to teach at most a network photograph service system. In this system, a user does not provide a digital image to the network photograph service system via a network. Rather, *Shiota* describes that a picture image is obtained by a film scanner by scanning a film brought in by a customer to a photo lab or "obtained from a memory or the like of a digital camera brought in by a customer." Col. 2, lines 33-42 and col. 7, lines 45-57. As such, *Shiota* fails to teach or suggest at least "receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter," as recited in claim 12.

Further, *Shiota* describes that a print is provided to a user. For example, a customer may request a new print of a stored digital image to be

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made and the print is then mailed or received by picking up the print at the photo lab. Col 3, lines 19-30; col. 4, lines 29-42; col. 8, lines 17-31; col. 9, lines 5-16. Also, if a print is outputted by a photo lab or laboratory according to a processing procedure, such as to rotate a picture by 90 degrees or to lower the saturation of the specified picture, the resulting print is affected by such a procedure and not the stored digital image. Moreover, a print of the stored digital image is provided to the customer and not the digital image itself. Cols. 4-5, lines 55-37. As such, *Shiota* fails to teach or suggest at least "enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter," as recited in claim 12.

Likewise, *Shiota* fails to teach or suggest at least "transmitting an enhanced digital image packet to the customer via the network, wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images," as recited in claim 12, since *Shiota* does not transmit an enhanced digital image to a user, among other reasons.

Echerer fails to cure the deficiencies of the *Shiota* reference in disclosing all of the features of claim 12. For example, *Echerer* fails to teach or suggest that a digital image is received from a customer via a network. Rather, in *Echerer*, a radiograph is scanned so that a digital representation may be made. Further, *Echerer* fails to teach or suggest an "enhanced digital image packet [that] includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images," as recited in claim 12. Although the Examiner in the Advisory Action strongly advocates that *Echerer* discloses the foregoing feature,

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Applicant respectfully notes that *Echerer* states that "processing enhances the image displayed and extracts information from the image as a result of an interchange of instructions and responses between CPU and user." *See* col. 8, lines 18-22 and Advisory Action, page 2 ("It is unclear why Applicant insists that the report does not contain information that decribes [sic] the enhancemnts [sic] made for the digital images when it so clearly does."). Applicant respectfully submits that the "information" referenced in the above passage refers to information available in the digital representation of an X-ray image that is not discernable from the X-ray image itself. Accordingly, a report may be prepared "using the information and the image together with its enhancements and/or without them." Col. 6, lines 33-35. For example, *Echerer* also states that "[t]he apparatus helps to extract that information by creating an accurate image or replica from the radiograph and performing certain operations on it to enhance it and to analyze it so that the information it contains can be readily discerned, diagnosed and, in general, evaluated by the user." Col. 4, lines 4-12. As such, *Echerer* fails to teach or suggest that an enhanced digital packet that includes a description of enhancements made for a digital image, as described in claim 12, among other claimed features.

As a result, a *prima facie* case establishing an obviousness rejection by the proposed combination of *Shiota* in view of *Echerer* has not been made. Therefore, the rejection of claim 12 should be withdrawn.

F.   Applicant's Claims 13-15

Because independent claim 12 is allowable over the cited art of record, dependent claims 13-15 (which depend from independent claim 2) are

allowable as a matter of law for at least the reason that dependent claims 13-15 contain all the features of independent claim 12. For at least this reason, the rejections of claims 13-15 should be withdrawn.
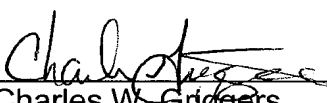
Additionally and notwithstanding the foregoing reasons for the allowability of claims 13-15, the dependent claims recite further features and/or combinations of features (as is apparent by examination of the claims themselves) that are patentably distinct from the cited art of record. Hence, there are other reasons why the dependent claims are allowable.

As one example, among others, the proposed combination of *Shiota* in view of *Echerer* fails to teach or suggest "wherein the step of enhancing the digital image, includes enhancing the digital image automatically based upon the customer preference parameter," as recited in claim 15, since neither *Shiota* nor *Echerer* disclose enhancement of a digital image received from a customer via a network or enhancing the digital image automatically based upon a customer preference parameter, in the particular manner claimed.

VIII. Conclusion

In summary, it is Applicant's position that Applicant's claims are patentable over the applied cited art references and that the rejection of these claims should be withdrawn. Appellant therefore respectfully requests that the Board of Appeals overturn the Examiner's rejection and allow Applicant's pending claims.

Respectfully submitted,

By: _____

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Claims Appendix under 37 C.F.R. § 41.37(c)(1)(viii)

The following are the claims that are involved in this Appeal.

1-3.   Canceled

4.   A digital image enhancement system, comprising:

means for receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter;

means for selecting a remote digital image editing system according to the customer preference parameter;

means for transmitting the digital image packet to the selected remote digital image editing system;

means for enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter; and

means for transmitting an enhanced digital image packet to the customer via the network,

wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images.

5.   The digital image enhancement system of claim 4, wherein the means for enhancing the digital image, includes means for automatically enhancing the digital image based on the customer preference parameter.

6-11. Canceled

12.   A digital image enhancement method, comprising the steps of:

receiving a digital image packet directly from a customer via a network, wherein the digital image packet includes a digital image from a digital camera and a customer preference parameter;

selecting a remote digital image editing system according to the customer preference parameter;

transmitting the digital image packet to the selected remote digital image editing system;

enhancing the digital image at the selected remote digital image editing system based on the customer preference parameter; and

transmitting an enhanced digital image packet to the customer via the network, wherein the enhanced digital image packet includes an enhanced digital image and an enhancement description packet that describes the enhancements made for each of the digital images.

13.   The digital image enhancement method of claim 12, wherein the step of enhancing the digital image, includes enhancing the digital image automatically based upon the customer preference parameter.

14.   The digital image enhancement method of claim 12, further comprising the step of enhancing the digital image automatically using an automatic digital image enhancement system.

15. The digital image enhancement method of claim 14, further comprises the steps of:

storing an enhancement performed on a previous digital image;

analyzing the enhancement performed on the previous digital image; and

establishing the enhancement parameter to be used by the automatic digital image enhancement system to automatically enhance the digital image.

16. Canceled

Evidence Appendix under 37 C.F.R. § 41.37(c)(1)(ix)

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

Related Proceedings Appendix under 37 C.F.R. § 41.37(c)(1)(x)

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.